Amendments to the Specification

Please cancel the replacement section "**BRIEF DESCRIPTION OF THE DRAWINGS**" that was submitted on April 23, 2007 and replace it with the following replacement section.

Please date 1/24/08 gz

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate several embodiments of the disclosed method and compositions and together with the description, serve to explain the principles of the disclosed method and compositions.

Figures 1A and 1B show metabolite-dependent conformational changes in the 202-nucleotide leader sequence of the *btuB* mRNA. Figure 1A shows separation of spontaneous RNA-cleavage products of the *btuB* leader using denaturing 10% polyacrylamide gel electrophoresis (PAGE). 5'-32p-labeled mRNA leader molecules (arrow) were incubated for 41 hr at 25°C in 20 mM $MgCl_2$, 50 mM Tris-HCl (pH 8.3 at 25°C) in the presence (+) or absence (-) of 20 μM of AdoCbl. Lanes containing RNAs that have undergone no reaction, partial digest with alkali, and partial digest with RNase T1 (G-specific cleavage) are identified by NR, ^-OH, and T1, respectively. The location of product bands corresponding to cleavage after selected guanosine residues are identified by filled arrowheads. Arrowheads labeled 1 through 8 identify eight of the nine locations that exhibit effector-induced structure modulation, which experience an increase or decrease in the rate of spontaneous RNA cleavage. The image was generated using a phosphorimager (Molecular Dynamics), and cleavage yields were quantitated by using ImageQuant software. Figure 1B shows sequence and secondary-structure model for the 202-nucleotide leader sequence of *btuB* mRNA (SEQ ID NO: 1) in the presence of AdoCbl. Putative base-paired elements are designated P1 through P9. Complementary nucleotides in the loops of P4 and P9 that have the potential to form a pseudoknot are juxtaposed. Nine specific sites of structure modulation are identified by arrowheads. The asterisks demark the boundaries of the B_{12} box (nucleotides 141-162). The coding region and the 38 nucleotides that reside immediately